

regulatory elements typically include a transcriptional promoter, an optional operator sequence to control transcription, a sequence encoding suitable mRNA ribosomal binding sites, and sequences that control the termination of transcription and translation. The ability to replicate in a host, usually conferred by an origin of replication, and a selection gene to facilitate recognition of transformants may additionally be incorporated.

In accordance with 37 CFR §1.121 a marked up version of the above-amended paragraph(s) illustrating the changes introduced by the forgoing amendment(s) are provided in Appendix A.

**In the Claims:**

Please amend the claims by substituting the following claims for the corresponding previously pending claims of the same number(s):

1. A method of screening for an agent that modulates the ability of a cell to accumulate or to degrade a metabolic product, said method comprising:

(i) providing a mammalian cell comprising:

a first nucleic acid encoding a peptide binding site and an effector gene;

a first chimeric protein comprising a nucleic acid binding domain that binds said peptide binding site attached to said metabolic product or to a ligand that binds to said metabolic product; and

a second chimeric protein comprising an expression control protein attached to said metabolic product or to said ligand that binds to said metabolic product such that when said first chimeric protein comprises said metabolic product, said second chimeric protein comprises said ligand and when said first chimeric protein comprises said ligand, said second chimeric protein comprises said metabolic product;

(ii) contacting said cell with a test agent; and

(iii) detecting an alteration of expression of said effector gene wherein a difference in the expression of said effector gene in said test cell, as compared to a control cell contacted with a lower concentration of test agent or no test agent indicates that said test agent modulates the ability of said cell to accumulate or degrade said metabolic product.